

SFQ3 - Data Access and Transfer Confidence Test

Test Objectives:

The objective of this test is to demonstrate the overall capability of ECS to provide users with specific data as requested from various spacecraft and instruments. Data from the AM-1, Landsat-7 and SAGE III missions will be acquired via an ECS client accessed through a Personal Computer (PC) or XWindow Graphical User Interface (GUI) Workstation (WS). Data are accessed through the B0 Search and Order Tool (B0SOT), which interfaces with the B.0 data server infrastructure via the V0 gateway, and the JAVA Earth Science Tool (JEST). Data are supplied on various types of media (CD-ROM, 4MM tape, etc.). These tests are designed to access the services of the DAACs available for this release. Following successful access and product distribution, all results will be verified against the criteria selected prior to the start of test activities.

The process to access and transfer data products involves several key steps, including:

- The identification of appropriate data sets through directory, guide and inventory searches.
- The ability to browse or visually sub-sample data sets for scientist and non-scientist users.
- The ability to specify exactly which data is desired, through identification of explicit parameters, formats, sensors, platforms, and/or geographic areas of data coverage.
- The ability to request the order for the desired data to the ECS including standing and one time orders.
- The ability to receive data from ECS via electronic and hard media means.
- The ability to receive Information Management System (IMS) information regarding outstanding and backlog data requests.

Support for a wide variety of users must also be facilitated. Users are categorized within two primary groups, each with different technical backgrounds (see Table 3-1), and three levels of user interaction support (expert, intermediate and novice).

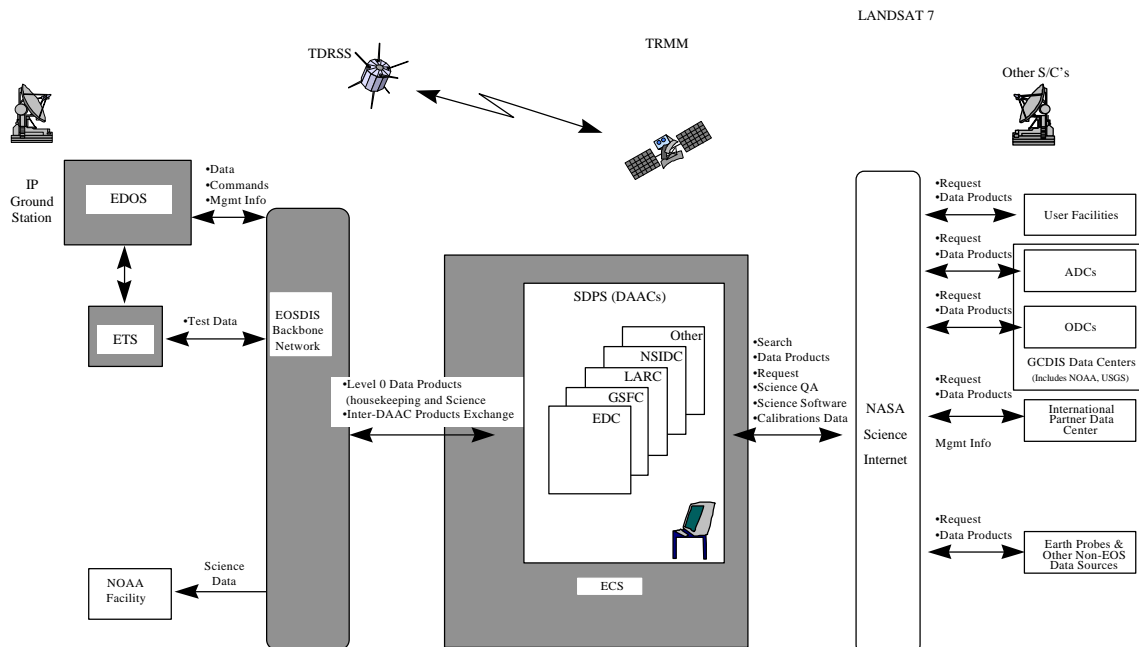
User Category	Technical Background	Data Volume	Data Frequency
NASA Scientist	Highly technical	High	Frequent
Non-NASA Scientist or Non-Scientist	Very diverse: Some will be highly technically competent, while other users (such as K-12) will generally have a very limited technical background	Moderate to High for scientists, Low to Moderate for others such as K-12 educators	Frequent but not consistent throughout the year

Table 3-1. User Categories

Requirements Associated With Functions:

DADS2370	DADS2490	DADS2510	DADS2530	DADS2580	ESN0280
ESN0290	ESN0300	ESN1180	IMS0040	IMS0100	IMS0130
IMS0160	IMS0210	IMS0230	IMS0510	IMS1080	IMS1650
IMS1700	SMC1330	SMC3350			

Test Configuration:



Participants and Support Requirements:

Participating Organizations:

M & O Support at EDC DAAC
M & O Support at GSFC DAAC
M & O Support at LaRC DAAC
M & O Support at MSFC SCF
M & O Support at NSIDC DAAC

Communication

Voice: CCL or direct phone line to system personnel
Data: EBnet WAN Routers and associated hardware
NSI for General Users
IP Addresses: Release B0 IMS ; XWindow GUI's, PC's

Equipment and Software

Software: Release B.0 Client Software configured on each workstation
Desktop PC's, WWW Browsers, FTP Software
Hardware: XWindow GUI's
486 or better PC

Tools:

TMDB - the test management database will keep track of all test cases and procedures while mapping requirements

B0SOT - B0 Search and Order Tool used to select and order products

JEST - JAVA Earth Science Tool used to select and order products via Web access

EOSView - HDF tool used to browse images

XRunner - to create test scripts that can be run as often as necessary and at any time (off-shift) with results recorded for later analysis

LoadRunner - simulates several users accessing data and resources simultaneously

Test Case Summary

Test Case ID	Missions	Test Description
3.1.1	AM-1, Landsat-7, SAGE III, Misc.	Directory Search and Access
3.1.2	AM-1, Landsat-7, SAGE III, Misc.	Directory Search and Web Access
3.2.1	AM-1, Landsat-7, SAGE III, Misc.	Guide Search and Access
3.2.2	AM-1, Landsat-7, SAGE III, Misc.	Guide Search and Web Access
3.3.1	AM-1, Landsat-7, SAGE III, Misc.	Inventory Search and Access
3.3.2	AM-1, Landsat-7, SAGE III, Misc.	Inventory Search and Web Access
3.4.1	AM-1, Landsat-7, SAGE III, Misc.	Integrated Inventory and Browse Search Access
3.4.2	AM-1, Landsat-7, SAGE III, Misc.	Integrated Inventory and Browse Search Web Access
3.4.3	AM-1, Landsat-7, SAGE III, Misc.	EOSView
3.5.1	AM-1, Landsat-7, SAGE III, Misc.	ECS Desktop
3.6.1	AM-1, Landsat-7, SAGE III, Misc.	Data Access and User Authorization
3.6.2	AM-1, Landsat-7, SAGE III, Misc.	Data Order and Receipt of Products
3.6.3	AM-1, Landsat-7, SAGE III, Misc.	Advertising
3.6.4	AM-1, Landsat-7, SAGE III, Misc.	Standing Orders/Subscriptions and Scheduling
3.6.5	AM-1, Landsat-7, SAGE III, Misc.	Outstanding and Completed Orders
3.7.1	AM-1, Landsat-7, SAGE III, Misc.	Interactive, Non-Interactive & Client/Server Interface Performance
3.7.2	AM-1, Landsat-7, SAGE III, Misc.	Integrated Directory, Guide, Inventory, Browse Search and Access Performance
3.8.1	AM-1, Landsat-7, SAGE III, Misc.	Error Handling

For each of the tests listed above, the “Test Set-Up” section indicates logging on a PC or WS for beginning the test. It has not been determined where the tests will be run from. Tests may be run from each of the DAACs, at off-site test facilities such as individual WSs or PCs of the tester, in which a telnet command is executed for specific DAACs or from a Web Browser such as Netscape. In each case, logon will be performed from a client WS. Detailed information will be provided in the “Test Set-Up” section prior to the start of each test.

Test Data:

Mission/Instrument		Characteristics (1)	Source(2)	Data Location
AM-1	ASTER	L1A, L1B, L2 thru L4; Browse		EDC
AM-1	CERES	L1A, L1B, L2 thru L4; Spatial		LaRC
AM-1	MISR	L1A, L1B, L2 thru L4; Browse Spatial/Temporal		GSFC/LaRC
AM-1	MODIS	L1A, L1B, L2 thru L4; Browse/		LaRC/NSIDC
AM-1	MOPITT	L1A, L1B, L2 thru L4; Spatial/Temporal		LaRC
Landsat-7	ETM+	Level OR, Level 1G, 7 Spectral bands		EDC
Meteor 3M III	SAGE			LaRC

- (1) The Characteristics of data will represent each data type available for access by users at all levels. They include:

- L0 - Raw instrument data; no duplication
- L1A - Reversibly transformed L0 data; located to coordinate system; associated ancillary & engineering data
- L1B - radiometrically corrected as full instrument resolution; associated ancillary data (orbit & attitude ancillary, auxiliary & correlative)
- L2 - environmental variables with similar resolution as Level 1; associated ancillary data (orbit & attitude ancillary, auxiliary correlative)
- L3 - data or environment; spatial and/or temporal subsampling
- L4 - model output, based on lower levels
- Other - Production History; Documents; Directory, Inventory, Guide and Browse Search Data and Associated Metadata; Algorithm Access

- (2) Test data sets have been requested and identified as listed. In addition, data available for use in related Confidence Test Packages provide another source. All data sets available will be identified and secured prior to test activities.

Test Case Descriptions:

3.1.1 Directory Search and Access

This test verifies the capability of a new science user to access data by performing a Directory Search. Directory information will be obtained via the NSI through an ECS client utilizing the B0SOT. High-level data set information from the various mission and instruments is displayed.

Requirements Verified:

DADS2370 ESN0280 ESN0290 ESN1180 IMS0040
IMS0130 IMS0230 IMS0510 SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
1.003		Verify the B0SOT is available for access on the PC or Workstation.		
1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		

Test Execution:

Step	Station	Action	Expected Results	Comments
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2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Type in the command to access the B0SOT.	A screen indicating access to the tool is displayed.	
2.003		Click on the button labeled “New User”	A screen to enter first and last name appears	
2.004		Enter: First and Last name, Click on OK and enter a password; Click on OK	“Starting the IMS” and “Initializing the IMS GUI” messages appear	
2.005		Click on User Profile and enter information; Save when information is complete.	This information is stored and is referenced on subsequent logins	
2.006		Click on “Directory” for the type of search desired	Directory search screen appears	Searches are Inventory, Directory or Guide
2.007		Choose Parameter Information for AM-1 ASTER	Information selected for AM-1 ASTER is displayed on screen	Include Platform/Source, Instrument/Sensor, Processing level, Data Center
2.008		Click on the “Save Search” button to save the AM-1 ASTER parameters	This search may be re-used later for regression purposes	Choose a Save Set name equal to the Test Case ID Number (i.e. 3.1.1)
2.009		Click on the “Execute Search” button	The directory search window results appear	
2.010		View the communications status screen for the directory search results.	Data Transmission status is indicated	
2.011		Verify that each button is highlighted, indicating a successful completion: Open Connection, Sending Message, Receiving Results, Completed Successfully	The transaction is complete and data sets are available for viewing and transfer.	

2.012		If the comments button is highlighted, this may indicate that data is continuing to be accessed. Click on the “Comments” button to read additional information concerning data requested.	Additional information is displayed about the data transaction.	
2.013		Click on the “View Data” button to view the data sets available	Several data sets and ID information are indicated on the directory results screen.	
2.014		Verify the data set information matches the AM-1 ASTER parameter selections from the Search Screen	Data sets are expected to match the input parameters.	
2.015		Click on the “Count Button” to select a data set.	The data set chosen is highlighted and the Detail Directory Information Screen appears.	
2.016		Select each option and verify the information is based on the parameter information for AM-1 ASTER as requested.	Detailed information is provided on the screen as each option is chosen.	
2.017		Verify the accuracy of the following information: a) Brief Description, b) Attribute, c) Data Center, d) Personnel, e) Reference	All information should correspond to the request entered for the AM-1 ASTER data.	
2.018		Select the “Current Data Set Information” option under the “GO TO” menu.	Directory Results Screen appears after it is selected.	
2.019		Compare the Data set information with the detailed guide information.	This information is based on the search data criteria.	

2.020		Click on the “Next Data Center” option to view the results of the remaining searches.	The Directory information should match the criteria from the search entered for each data center	
2.021		Repeat steps 15 through 20 until all data centers have been chosen.	The data results from each center should match the search criteria inserted.	
2.022		Repeat steps 1 through 21 until all mission and instrument combinations have been selected.	Guide information on all missions and instruments available are reviewed. . See Test Data chart for details.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Compare all data sets with the ones expected. Verify the amount of data, time coverage and benchmark information available.	The data sets are expected to match the criteria and the benchmark data sets.	
3.002		Indicate any discrepancies and report as required.		
3.003		Verify that all searches have been saved before exiting the system. Log off the system	The searches are expected to be saved for future test cases.	
3.004		Verify all sessions have been terminated. Retrieve printouts for future reference and further analysis.		

3.1.2 Directory Search and Web Access

This test verifies the capability of a new science user to access data by performing a Directory Search. Directory information will be obtained via the NSI through an ECS client utilizing the JEST. High-level data set information from the various mission and instruments is displayed.

Requirements Verified:

DADS2370 ESN0280 ESN0290 ESN1180 IMS0040
 IMS0130 IMS0230 IMS0510 SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
1.003		Verify the JEST is available for access on the PC or Workstation.		
1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		

Test Execution:

Step	Station	Action	Expected Results	Comments
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2.005		Click on User Profile and enter information; Save when information is complete.	This information is stored and is referenced on subsequent logins	
2.006		Click on “Directory” for the type of search desired	Directory search screen appears	Searches are Inventory, Directory or Guide
2.007		Choose Parameter Information for AM-1 ASTER	Information selected for AM-1 ASTER is displayed on screen	Include Platform/Source, Instrument/Sensor, Processing level, Data Center
2.008		Click on the “Save Search” button to save the AM-1 ASTER parameters	This search may be re-used later for regression purposes	Choose a Save Set name equal to the Test Case ID Number (i.e. 3.1.1)
2.009		Click on the “Execute Search” button	The directory search window results appear	
2.010		View the communications status screen for the directory search results.	Data Transmission status is indicated	
2.011		Verify that each button is highlighted, indicating a successful completion: Open Connection, Sending Message, Receiving Results, Completed Successfully	The transaction is complete and data sets are available for viewing and transfer.	
2.012		If the comments button is highlighted, this may indicate that data is continuing to be accessed. Click on the “Comments button to read additional information concerning data requested.	Additional information is displayed about the data transaction.	
2.013		Click on the “View Data” button to view the data sets available	Several data sets and ID information are indicated on the directory results screen	

2.014		Verify the data set information matches the AM-1 ASTER parameter selections from the Search Screen	Data sets are expected to match the input parameters.	
2.015		Click on the “Count Button” to select a data set.	The data set chosen is highlighted and the Detail Directory Information Screen appears.	
2.016		Select each option and verify the information is based on the parameter information for AM-1 ASTER as requested.	Detailed information is provided on the screen as each option is chosen.	
2.017		Verify the accuracy of the following information: a) Brief Description, b) Attribute, c) Data Center, d) Personnel, e) Reference	All information should correspond to the request entered for the AM-1 ASTER data.	
2.018		Select the “Current Data Set Information” option under the “GO TO” menu.	Directory Results Screen appears after it is selected.	
2.019		Compare the Data set information with the detailed guide information.	This information is based on the search data criteria.	
2.020		Click on the “Next Data Center” option to view the results of the remaining searches.	The Directory information should match the criteria from the search entered for each data center	
2.021		Repeat steps 15 through 20 until all data centers have been chosen.	The data results from each center should match the search criteria inserted.	
2.022		Repeat steps 1 through 21 until all mission and instrument combinations have been selected.	Guide information on all missions and instruments available are reviewed. See Test Data chart for details.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Compare all data sets with the ones expected. Verify the amount of data, time coverage and benchmark information available.	The data sets are expected to match the criteria and the benchmark data sets.	
3.002		Indicate any discrepancies and report as required.		
3.003		Verify that all searches have been saved before exiting the system. Log off the system	The searches are expected to be saved for future test cases.	

3.2.1 Guide Search and Access

This test verifies the capability of a new science user to access data by performing a Guide Search. Guide information will be obtained via the NSI through an ECS client utilizing the B0SOT. Detailed information from the various mission and instruments including Platform/Source, Instrument/Sensor, Processing level and Data Center is displayed.

Requirements Verified:

DADS2370 ESN0280 ESN0290 ESN1180 IMS0040
IMS0130 IMS0230 IMS0510 SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
1.003		Verify the B0SOT is available for access on the PC or Workstation.		

1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		
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Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Type in the command to access the B0SOT.	A screen indicating access to the tool is displayed.	
2.003		Click on the button labeled "New User"	A screen to enter first and last name appears	
2.004		Enter: First and Last name, Click on OK and enter a password; Click on OK	"Starting the IMS" and "Initializing the IMS GUI" messages appear	
2.005		Click on User Profile and enter information; Save when information is complete.	This information is stored and is referenced on subsequent logins	
2.006		Click on "Guide" for the type of search desired or click on "Go To" and choose Directory Information.	The Guide search screen appears.	
2.007		Choose each Data Center and highlight the AM-1 data available for the initial center.	Information selected for AM-1 ASTER is displayed on the screen	

2.008		Click on each item in the Table Of Contents or Scroll down each item using the arrow down key to view all information. This includes: 1) Platform or Data Collection Environment Overview, 2) Ground Segment Information, 3) References, 4) Glossary of Terms, 5)List of Acronyms and 6) Document Information	Each item is expected to contain detailed information about the AM-1 data items.	
2.009		After information is verified, click on the “Next Data Center” and choose AM-1 Information. Continue reviewing all information until all data centers and AM-1 instruments have been chosen.	Each instrument available for the data centers chosen should be complete and up-to-date. All information should be accurate.	
2.010		After completion of the AM-1 information, repeat steps 7 through 9 while choosing the Landsat-7, SAGE III, and remaining mission and instrument combinations. See the Test Data Information Section.	Guide information for each mission and instrument combination in the Test Data Section should be accurate and available for review.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Compare all guide information with the data sets available. Verify repeatability.	The data sets are expected to match the criteria and the benchmark data sets.	

3.002		Indicate any discrepancies and report as required.		
3.003		Verify that all searches have been saved before exiting the system. Log off the system	The searches are expected to be saved for future test cases.	

3.2.2 Guide Search and Web Access

This test verifies the capability of a new science user to access data by performing a Guide Search. Guide information will be obtained via the NSI through an ECS client utilizing the JEST. Detailed information from the various mission and instruments including Platform/Source, Instrument/Sensor, Processing level and Data Center is displayed.

Requirements Verified:

DADS2370 ESN0280 ESN0290 ESN1180 IMS0040
IMS0130 IMS0230 IMS0510 SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
1.003		Verify the JEST is available for access on the PC or Workstation.		

1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		
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Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Type in the command to access the JEST.	A screen indicating access to the tool is displayed.	
2.003		Click on the button labeled "New User"	A screen to enter first and last name appears	
2.004		Enter: First and Last name, Click on OK and enter a password; Click on OK	"Starting the IMS" and "Initializing the IMS GUI" messages appear	
2.005		Click on User Profile and enter information; Save when information is complete.	This information is stored and is referenced on subsequent logins	
2.006		Click on the "New Search" button located at the top of the search form.	New Search is initiated with data presentation options defined.	
2.007		Click on "Guide" for the type of search desired or click on "Go To" and choose Directory Information.	The Guide search screen appears.	
2.008		Choose each Data Center and highlight the AM-1 data available for the initial center.	Information selected for AM-1 ASTER is displayed on the screen	

2.009		Click on each item in the Table Of Contents or Scroll down each item using the arrow down key to view all information. This includes: 1) Platform or Data Collection Environment Overview, 2) Ground Segment Information, 3) References, 4) Glossary of Terms, 5)List of Acronyms and 6) Document Information	Each item is expected to contain detailed information about the AM-1 data items.	
2.010		Verify Guide Information by reading the Information on the screen		
2.011		Verify retrievable information by clicking highlighted information	Relevant Documentation appears.	
2.012		After information is verified, click on the “Next Data Center” and choose AM-1 Information.		
2.013		Continue reviewing all information until all data centers and AM-1 instruments have been chosen.	Each instrument available for the data centers chosen should be complete and up-to-date. All information should be accurate.	
2.014		After completion of the AM-1 information, repeat steps 7 through 9 while choosing the Landsat-7, SAGE III, and remaining mission and instrument combinations. See the Test Data Information Section.	Guide information for each mission and instrument combination in the Test Data Section should be accurate and available for review.	

Test Termination:

Step	Station	Action	Expected Results	Comments
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3.001		Compare all guide information with the data sets available. Verify repeatability.	The data sets are expected to match the criteria and the benchmark data sets.	
3.002		Indicate any discrepancies and report as required.		
3.003		Verify that all searches have been saved before exiting the system. Log off the system.	The searches are expected to be saved for future test cases.	

3.3.1 Inventory Search and Access

This test verifies the capability of a new science user to access data by performing an Inventory Search . Information will be obtained via the NSI through an ECS client utilizing the B0SOT. Detailed information describing specific observations and data granules that are available for order requests are displayed.

Requirements Verified:

DADS2370 ESN0280 ESN0290 ESN1180 IMS0040
IMS0130 IMS0230 IMS0510 SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
1.003		Verify the B0SOT is available for access on the PC or Workstation.		

1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		
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Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Type in the command to access the B0SOT.	A screen indicating access to the tool is displayed.	
2.003		Click on the button labeled "New User"	A screen to enter first and last name appears	
2.004		Enter: First and Last name, Click on OK and enter a password; Click on OK	"Starting the IMS" and "Initializing the IMS GUI" messages appear	
2.005		Click on User Profile and enter information; Save when information is complete.	This information is stored and is referenced on subsequent logins	
2.006		Click on "Inventory" for the type of search desired	Inventory search screen appears	Searches are Inventory, Directory or Guide
2.007		Choose 1) Campaign Project 2) Platform/Source 3) Instrument/Sensor 4) Parameter 5) All processing Levels 6) Data set and 7) Data Center Information for AM-1 ASTER data.	Information selected for ASTER is displayed on screen	Include Platform/Source, Instrument/Sensor, Processing levels 3 or 4 and the Data Center
2.008		Select the various		

		Select the 2) Rectangular Option	Choose S or N Latitude and E or W Longitude	
		Select the 3) Four Corners Option	A screen appears with Four Corners and Latitude and Longitude is selected .	
		Select the 4) Point & Range Option	A screen appears to select the Center Points for Longitude & Latitude	
		Select the 5) Global Granules Only Option		
		Select the 6) Global Search Option	A map appears to select the Northernmost, Southernmost, Eastern or Westernmost Area	
2.009		Select “Both” for Day & Night Coverage		
2.010		Select the No. of Granules		The default is 100. Use 100 for the initial search and change for subsequent searches
2.011		Choose the Continuous Time Range Coverage		Select the Annually Repeating Time Period for Subsequent searches and alternate.
2.012		Click on the “Save Search” button to save the AM-1 ASTER parameters	The search information is saved and the Communications Screen Appears	Choose a Save Set name equal to the Test Case ID Number (i.e. 3.3.1)
2.013		View the Communications Status/Inventory Search screen for results.	The status of the search appears.	

2.014		Verify the completion status of each screen portion: Data Center through Completed Successfully.	The Successful Completion Status is highlighted, indicating the transaction was a success. The View Data button should be highlighted.	A View Comments highlighted button indicates additional information. Click on this if highlighted.
2.015		Click on the View Data Indicators button.	The Inventory Results Screen appears with granule information of data found.	
2.016		Click on the "View Data" button to view the inventory results	The View Data Screen Appears	
2.017		Choose each data set to review the data available and information.		
2.018		Verify all data within the list including additional sets that are available		
2.019		Verify the No. of Granules, detailed information, coverage and additional information.	Data available for orders, browse and FTP are indicated	
2.020		Record the information for future ordering test cases.		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Compare all data sets with the ones expected. Verify the amount of data, time coverage and benchmark information available.	The data sets are expected to match the criteria and the benchmark data sets.	
3.002		Indicate any discrepancies and report as required.		

3.003		Verify that all searches have been saved before exiting the system. Log off the system	The searches are expected to be saved for future test cases.	
3.004		Verify all sessions have been terminated. Retrieve printouts for future reference and further analysis.		

3.3.2 Inventory Search and Web Access

This test verifies the capability of a new science user to access data by performing an Inventory Search. Information will be obtained via the NSI through an ECS client utilizing the JEST. Detailed information describing specific observations and data granules that are available for order requests are displayed .

Requirements Verified:

DADS2370 ESN0280 ESN0290 ESN1180 IMS0040
IMS0130 IMS0230 IMS0510 SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
1.003		Verify the JEST is available for access on the PC or Workstation.		

1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		
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Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Type in the command to access the JEST.	A screen indicating access to the tool is displayed.	
2.003		Click on the button labeled "New User"	A screen to enter first and last name appears	
2.004		Enter: First and Last name, Click on OK and enter a password; Click on OK	"Starting the IMS" and "Initializing the IMS GUI" messages appear	
2.005		Click on User Profile and enter information; Save when information is complete.	This information is stored and is referenced on subsequent logins	
2.006		Click on "Inventory" for the type of search desired	Inventory search screen appears	Searches are Inventory, Directory or Guide
2.007		Choose 1) Campaign Project 2) Platform/Source 3) Instrument/Sensor 4) Parameter 5) All processing Levels 6) Data set and 7) Data Center Information for AM-1 ASTER data.	Information selected for ASTER is displayed on screen	Include Platform/Source, Instrument/Sensor, Processing levels 3 or 4 and the Data Center
2.008		Select the various Geographic Area coverage options beginning with 1) Select From Map	A map appears to select Latitude and Longitude parameters, zoom In & Out features and NW, NE, SE, SW.	Select each option for separate searches (1 -6)

		Select the 2) Rectangular Option	Choose S or N Latitude and E or W Longitude	
		Select the 3) Four Corners Option	A screen appears with Four Corners and Latitude and Longitude is selected .	
		Select the 4) Point & Range Option	A screen appears to select the Center Points for Longitude & Latitude	
		Select the 5) Global Granules Only Option		
		Select the 6) Global Search Option	A map appears to select the Northernmost, Southernmost, Eastern or Westernmost Area	
2.009		Select “Both” for Day & Night Coverage		
2.010		Select the No. of Granules		The default is 100. Use 100 for the initial search and change for subsequent searches
2.011		Choose the Continuous Time Range Coverage		Select the Annually Repeating Time Period for Subsequent searches and alternate.
2.012		Click on the “Save Search” button to save the AM-1 ASTER parameters	The search information is saved and the Communications Screen Appears	Choose a Save Set name equal to the Test Case ID Number (i.e. 3.3.1)
2.013		View the Communications Status/Inventory Search screen for results.	The status of the search appears.	

2.014		Verify the completion status of each screen portion: Data Center through Completed Successfully.	The Successful Completion Status is highlighted, indicating the transaction was a success. The View Data button should be highlighted.	A View Comments highlighted button indicates additional information. Click on this if highlighted.
2.015		Click on the View Data Indicators button.	The Inventory Results Screen appears with granule information of data found.	
2.016		Click on the "View Data" button to view the inventory results	The View Data Screen Appears	
2.017		Choose each data set to review the data available and information.		
2.018		Verify all data within the list including additional sets that are available		
2.019		Verify the No. of Granules, detailed information, coverage and additional information.	Data available for orders, browse and FTP are indicated	
2.020		Record the information for future ordering test cases.		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Compare all data sets with the ones expected. Verify the amount of data, time coverage and benchmark information available.	The data sets are expected to match the criteria and the benchmark data sets.	
3.002		Indicate any discrepancies and report as required.		

3.003		Verify that all searches have been saved before exiting the system. Log off the system	The searches are expected to be saved for future test cases.	
3.004		Verify all sessions have been terminated. Retrieve printouts for future reference and further analysis.		

3.4.1 Integrated Inventory and Browse Search Access

This test verifies the capability of a new science user to access data by performing an Inventory Browse Search. Browse information will be obtained via the NSI through an ECS client utilizing the B0SOT. Granule-level data descriptions representing various missions and instruments available from various Data Centers are displayed.

Requirements Verified:

DADS2370 ESN0290 ESN1180 IMS0230 IMS0510
SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
1.003		Verify the B0SOT is available for access on the PC or Workstation.		

1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		
1.005		Have the 3.3.1 save set results available for retrieval and as input to this test case.		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Type in the command to access the B0SOT.	A screen indicating access to the tool is displayed.	
2.003		Click on “Inventory” for the type of search desired.		
2.004		Click on the Search Screen.	The Search Screen appears.	
2.005		Click on Retrieve search.	A small screen appears with the names of previously saved searches,	
2.006		Highlight the search from Test Case 3.3.1. and click on the “load button”.	The search from Test Case 3.31 is loaded with criteria from this search.	
2.007		Choose the “execute” search button to receive the results of this search.	Results are the same as the initial search.	
2.008		Compare the search with the results recorded in the original search. Verify that the information is the same.	The information should be the same.	

2.009		Click on the View Data button and compare data information.	The Inventory results screen appears with granule information.	
2.010		Verify the No. of data granules, detailed information coverage and additional information.		
2.011		Choose Platform/Source, Instrument/Sensor, and parameters.		
2.012		Verify the Number of Data Sets and Data Center Information.		Record this information for future use.
2.013		Verify the No. of Granules in the group and the No. of Granules in all groups.		Record this information for future use.
2.014		Click on the data set information that indicates “IB” for integrated browse and “FB” for FTP Browse.	The data sets are highlighted.	
2.015		Choose “Go to Browse” from the Menu options	Communication Status Browse Request Screen appears.	
2.016		Once the Communication Status completes to “View Image for Integrated Browse”, review results.	A results screen is expected.	
2.017		A screen indicating results contain: Data Center, Image ID, Type and Image Completion.		
2.018		Click on Image Button to view image.	The image appears and there is an option to order the image.	
2.019		Save the Order image and record for ordering in the Ordering Data Test Case.		

2.020

Repeat until all
Mission/Instrument
combinations in the Test
Data chart have been
viewed.

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
1.003		Verify the JEST is available for access on the PC or Workstation.		
1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		
1.005		Have the 3.3.2 save set results available for retrieval and as input to this test case.		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Type in the command to access the JEST.	A screen indicating access to the tool is displayed.	
2.003		Click on “Inventory” for the type of search desired.		
2.004		Click on the Search Screen.	The Search Screen appears.	
2.005		Click on Retrieve search.	A small screen appears with the names of previously saved searches,	

2.006		Highlight the search from Test Case 3.3.1. and click on the “load button”.	The search from Test Case 3.31 is loaded with criteria from this search.	
2.007		Choose the “execute” search button to receive the results of this search.	Results are the same as the initial search.	
2.008		Compare the search with the results recorded in the original search. Verify that the information is the same.	The information should be the same.	
2.009		Click on the View Data button and compare data information.	The Inventory results screen appears with granule information.	
2.010		Verify the No. of data granules, detailed information coverage and additional information.		
2.011		Choose Platform/Source, Instrument/Sensor, and parameters.		
2.012		Verify the Number of Data Sets and Data Center Information.		Record this information for future use.
2.013		Verify the No. of Granules in the group and the No. of Granules in all groups.		Record this information for future use.
2.014		Click on the data set information that indicates “IB” for integrated browse and “FB” for FTP Browse.	The data sets are highlighted.	
2.015		Choose “Go to Browse” from the Menu options	Communication Status Browse Request Screen appears.	
2.016		Once the Communication Status completes to “View Image for Integrated Browse”, review results.	A results screen is expected.	

2.017		A screen indicating results contain: Data Center, Image ID, Type and Image Completion.		
2.018		Click on Image Button to view image.	The image appears and there is an option to order the image.	
2.019		Save the Order image and record for ordering in the Ordering Data Test Case.		
2.020		Repeat until all Mission/Instrument combinations in the Test Data chart have been viewed.		
2.021		Save all information for further verification and future testing.		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Compare all data sets with the ones expected. Verify the amount of data, time coverage and benchmark information available.	The data sets are expected to match the criteria and the benchmark data sets.	
3.002		Indicate any discrepancies and report as required.		
3.003		Verify that all searches have been saved before exiting the system. Log off the system	The searches are expected to be saved for future test cases.	
3.004		Verify all sessions have been terminated. Retrieve printouts for future		

This test verifies that a user may preview browse images, tables, text or other data accessed before ordering it. In addition format verification of data files and zooming capabilities are demonstrated.

Requirements Verified:

ESN1180 IMS0510 SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify that the EOSView software is available for access or can be launched from the Desktop.		
1.003		Have the previous (3.4.1 and 3.4.2) test case data information available.		
1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the workstation and execute the EOSView software.	The EOSView main window appears.	
2.002		Select the Open File option from the menu bar to open one of the previously saved test cases.	The criteria and information from the browse image is displayed.	

2.003		For the browse image, choose the various options available to display the image.	The browse image is displayed in each of the options available.	
2.004		Choose the Raster Image Option.	Data are displayed in text format.	
2.005		Choose the Zoom In and Out options.	The image is decreased or increased in size.	
2.006		Choose the different color options.	The image is shown with several color schemes.	
2.007		Choose one of the options to indicate the data represented in table format.	The image is represented in table or numeric format.	
2.008		Choose the animation option.	The animation images are displayed.	
2.009		Choose the latitude/longitude options.	The lines are displayed on the image.	
2.010		Repeat the options using different browses within the test cases.	All images are displayed according to the options chosen.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Verify that the options selected are properly displayed.		
3.002		Verify that the EOSView application is available through the JEST and BOSOT.		

3.003		Log any errors or problems found.		
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3.5.1 ECS Desktop

This test verifies that the ECS Desktop can access client applications to provide search, data access and ordering, information exchange and related client service capabilities. In addition, the available workbench tools are accessible to accommodate the Novice, Intermediate or Expert levels from the B0SOT or the JEST.

Requirements Verified:

ESN1180 IMS0100 IMS0160 IMS0210 IMS0230
IMS0510 IMS1650 SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify that the B0SOT and the JEST are available for access.		
1.003		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	

2.002		<p>On the user workstation, verify that the Desktop contains the icons necessary to launch the following applications:</p> <p>a) Data Acquisition Request Tool (DART) b) Data Dictionary c) User Preferences d) Document Search e) EOSView f) Comment Survey g) Advertising Service h)User Profile I)Trouble Ticketing j) Java Earth Science Tools</p>		
2.003		Set the Desktop to operate at the Novice level.		
2.004		Verify the prompts, help information, search operations and results are singular and easy to understand and follow. (command-driven)	<p>One search or order is displayed at a time, user prompts and help are displayed for every option selected. Incorrect syntax and semantics are corrected or noted.</p>	
			Prompting and automatic help when user initiates actions.	
2.005		Set the Desktop to operate at the Intermediate Level		
2.006		Verify help information, search operations and results use standard selection dialog.	Search parameters are entered directly into search tree and there are less detailed “help” information.	
			Prompting and automatic help supplied.	
2.007		Set the Desktop to operate at the Expert Level.		

2.008		Verify that there is a full screen editor, syntax and semantics are not corrected by the user.	Direct information input, no automatic help.	
2.009		Launch the various applications and randomly select the functions available for each.	Each application on the desktop should be launched successfully and the user is able to select the various functions available.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Terminate any applications remaining up.	All applications should be terminated.	
3.002		Note any discrepancies and record.		
3.003		Log out of the Desktop.		

3.6.1 Data Access and User Authorization

This test case verifies that all data types are accessed through the variety of networks and interfaces available for access. Data are retrieved through client/server applications as well as direct access to each DAAC available to users with proper authorization. In addition, data access controls based on user privileges are tested. Status information on all requests is verified.

Requirements Verified:

DADS2370	ESN0280	ESN0290	ESN1180	IMS0040
IMS0100	IMS0130	IMS0160	IMS0210	IMS0230
IMS0510	IMS1700	SMC1330	SMC3350	

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
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1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
		To Be Continued		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Log on to the individual DAAC to search and retrieve data		
		To Be Continued		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		To Be Determined		

3.6.2 Data Order and Receipt of Products

This test verifies the capability of a user to order data products using either XWindow client. Orders are constructed based on the previously saved searches. After viewing the data information for correctness, the data are ordered on various media and verified for correctness and completeness once received.

Requirements Verified:

DADS2490 DADS2510 DADS2530 DADS2580 ESN0280 ESN1180
IMS0100 IMS0210 IMS1080 SMC1330

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		Use the saved data sets from test cases 3.3.1 to 3.4.2.
1.003		Verify either the B0SOT or JEST is available for access on the PC or Workstation.		
1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Type in the appropriate command for access to the B0SOT or JEST.	A screen indicating access to the tool is displayed.	
2.003		Login as an existing user.		
2.004		Click on the Search Screen	The Search Screen appears.	
2.005		Click on Retrieve Search	A small screen appears with the names of previously saved searches.	

2.006		Highlight the search from the first test case (3.3.1) and click on the “load” button.	The search from the test case chosen is loaded with criteria from this search.	
2.007		Verify the criteria information with the information previously recorded.	The information should be the same.	
2.008		Choose the “execute” search button to receive the same inventory and/or browse results.	The results should be the same.	
2.009		Go to the Order Screen	The Order Screen appears.	
2.010		Select the following items: a) Item number b) Data Format c) Media Type d) Media Format	Each of the selections are highlighted.	
2.011		Before submitting the order, verify the following information on the Order Screen		
2.012		Click on “Submit Order”	The Order is submitted and the User Address screen appears.	
2.013		Complete the User Address Information.	The Order Confirmation screen appears.	
2.014		Verify that all information is accurate and click on “Order and Save”.	The order is completed and saved for future reference.	
2.015		Continue Ordering data until all data types listed in the Test Data section have been ordered. Save the orders for comparison once orders have been received.	All data types are ordered and saved for future verification and reordering capabilities.	

2.016		Verify that each media types listed in Requirement No. 2490 has been selected.		The test is complete only when the Test Termination Section has been satisfied.
2.017		Verify the format of the Distribution Request as specified in the critical design document (304-CD-002).	The format should match.	The document number may be updated as changes are made.
2.018		Log off of system.		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Once the data are received, verify the media label and shipping label format and information for correctness.	The information should match the order information from the request.	
3.002		Verify the contents of the packing list for correctness. Compare with the data ordered.	Information should be the same.	
3.003		Review data for content and compare against the benchmarked data sets.	The data received should match the data ordered.	
3.004		For the FTP orders, follow the directions in the email or notice.	The data are expected to be acquired the FTP.	
3.005		Verify the accuracy and completeness of the data, including format and time coverage.	The data are expected to be exactly as ordered.	
3.006		Note any discrepancies and report as required.		

3.6.3 Advertising

This test verifies the capability of a user to submit and search entries of Earth related services, providers and data. The test demonstrates the ability of users to conduct searches using specific keywords, text strings and attributes.

Requirements Verified:

DADS2370 ESN1180 IMS0100 IMS0510 SMC1330
SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify either the B0SOT or JEST is available for access on the PC or Workstation.		
1.003		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
1.003		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Type in the appropriate command for access to the B0SOT or JEST.	A screen indicating access to the tool is displayed.	
2.003		Login as an existing user.		

2.004		Enter the URL for the Earth Science Pages Search.	The Earth Science Pages Main Screen appears.	
2.005		Enter the keywords for this search(TBD).		
2.006		Enter the “Services” Option for type of search.		
2.007		Select “EOS” as the organization/mission option.		
2.008		Select “keyword” to find matches in.		
2.009		Submit the search.	The results of the search appear.	
2.010		Click on each of the “Results” listed.		
2.011		Verify the results of the search match the search criteria entered.		
2.012		Continue selected various keywords(TBD) and verify the results match the criteria.		
2.013		Return to the Earth Science Pages Search Screen.		
2.013		Search the Advertisement Screen by specific attributes (TDB).		
2.014		Verify that the results displayed are based on the attributes selected.		
2.015		Return to the Earth Science Pages Screen.		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Verify the keyword and attribute results requested through the advertisement service.		
3.002		Check for consistency, time coverage and accuracy of data.		
3.003		Note any discrepancies and report as required.		

3.6.4 Standing Orders/Subscriptions and Scheduling

This test verifies the capability of a user to obtain data by submitting standing orders or subscription requests for various types of data. Orders are constructed based on previously saved searches as well as new searches. After viewing the order information for correctness, the standing order will be submitted for **TDB** interval of time. Scheduling information is **TBD**.

Requirements Verified:

DADS2490	DADS2510	DADS2530	DADS2580	ESN0280
ESN0290	ESN0300	ESN1180	IMS0100	IMS0130
IMS0510	IMS1650	IMS1700	SMC1330	SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		Use the saved data sets from test cases 3.3.1 to 3.4.2. and create new searches.
1.003		Verify either the B0SOT or JEST is available for access on the PC or Workstation.		

1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		
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Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Follow the procedures in Test Case 2.001 to 2.004.		
2.002		Procedures to set up a standing order are TBD.		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		For each standing order and interval, verify that the order is submitted according to the order set-up.	At the TBD intervals, the orders are received automatically.	Continue to verify the standing orders routinely over a TDB amount of time.
3.001		Once the data are received, verify the media label and shipping label format and information for correctness.	The information should match the order information from the request.	
3.002		Verify the contents of the packing list for correctness. Compare with the data ordered.	Information should be the same.	
3.004		For the FTP orders, follow the directions in the email or notice.	The data are expected to be acquired the FTP.	

3.005		Verify the accuracy and completeness of the data, including format and time coverage.	The data are expected to be exactly as ordered.	
3.006		Once the system is terminated, start the system back up and verify the standing orders or subscriptions remain.		
3.007		Note any discrepancies and report as required.		

3.6.5 Outstanding and Completed Orders

This test verifies that the IMS reports containing standing orders and data availability are complete and accurate. The IMS reports are compared against the data ordered in test case 3.5.1 as well as the standing order criteria in test case 3.5.2.

Requirements Verified:

ESN1180 IMS1650 IMS1700 SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		Use the saved data sets from test cases 3.5.1 and 3.5.2.
1.003		Verify either the B0SOT or JEST is available for access on the PC or Workstation.		

1.004		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		
1.005		Generate the status reports and all order information available.		May require assistance from Operations personnel for some items.

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
2.002		Type in the appropriate command for access to the B0SOT or JEST.	A screen indicating access to the tool is displayed.	
2.003		Login as an existing user.		
2.004		Specific procedures are TBD.		This is a Release B.1 Capability.

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		Verify that the outstanding orders contain valid information. Compare with each specific order.		
3.002		Verify that the completed or filled orders contain updated information to reflect receipt of data and products.		

3.7.1 Interactive, Non-Interactive and Client/Server Interface Performance

This test case verifies that the interfaces providing data access and transfer services are providing these services efficiently and within the required formats available regardless of the type of interface. Non-interactive, remote and client/service interfaces are all tested to ensure data, media, general information and all services available meet exchange requirements. This includes binary structured, sequential text and other receipt formats.

Requirements Verified:

DADS2510 DADS2530 DADS2580 ESN0290 ESN1180
IMS0210 IMS0230 IMS0510 IMS1650 IMS1700
SMC1330 SMC3350

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
1.003		Record system and software information: IP address of PC or WS, environment set-up, known problems and other relevant information including date and time of test.		
		To Be Continued		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
		To Be Continued	.	

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		To Be Determined		

3.7.2 Integrated Directory, Guide, Inventory Browse Search and Access Performance

This test case verifies that the search and access services available are provided efficiently and within the required time constraints. It also verifies that these services can be accessed simultaneously by several users from different locations.

Requirements Verified:

DADS2370	DADS2510	DADS2530	DADS2580	ESN0280
ESN1180	IMS0100	IMS0160	IMS0230	IMS1650
IMS1700	SMC1330	SMC3350		

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
		To Be Continued		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	

		To Be Continued	.	
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Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		To Be Determined		

3.8.1 Error Handling

This test verifies that errors, failure messages and notifications are logged and provided to the user as required. In addition, expiration dates, space limitations and all access and transfer problems are provided to the user.

Requirements Verified:

DADS2370	DADS2510	DADS2530	DADS2580	ESN1180
IMS0040	IMS0100	IMS0130	IMS0160	IMS0210
IMS1650	IMS1700	SMC1330	SMC3350	

Test Procedures:

Test Set-Up:

Step	Station	Action	Expected Results	Comments
1.001		Ensure the ECS system is up and ready for access.		
1.002		Verify the test data is available and has been staged accordingly; Review and record data sets available.		
		To Be Continued		

Test Execution:

Step	Station	Action	Expected Results	Comments
2.001		Log on to the PC or WS.	You will be logged on to the PC or WS.	
		To Be Continued		

Test Termination:

Step	Station	Action	Expected Results	Comments
3.001		To Be Determined		

Appendix - Requirements Summary

Requirement	Description	Test Case (s)
DADS2370#B	Each DADS shall send the user, at a minimum, the following: a. L0-L4 b. Special products (L1-L4) c. Metadata d. Ancillary data e. Calibration data f. Correlative data g. Documents h. Algorithms i. Planning and scheduling information ‘Algorithms’ implies science software components. Algorithm and calibration data are provided to users by HTML services. Scheduled conflict analysis and resolution for external elements, agencies, or organizations will be a manual process. Items a, b, c, d, e, f, are supported in B0 for data types, as specified in the Data Types Services Matrix.	3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.6.1, 3.6.3, 3.7.2, 3.8.1
DADS2490	Each DADS shall distribute data using a variety of approved high density storage media such as: a. 8 mm tape b. 4 mm DAT c. 3480/3490 tape d. CD ROM e. 6250 tape	3.6.2, 3.6.4
DADS2510	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.	3.6.2, 3.6.4, 3.7.1, 3.7.2, 3.8.1
DADS2530#B	The DADS shall be capable of distributing by physical media to meet user demand. In B0, this is supported by the queue of Data Distribution Requests. Full distribution performance capability is provided in B.1.	3.6.2, 3.6.4, 3.7.1, 3.7.2, 3.8.1
DADS2580	Each DADS shall distribute data electronically using a variety of networks and methods including FAX.	3.6.2, 3.6.4, 3.7.1, 3.7.2, 3.8.1
ESN-0280#B	The ESN shall provide file transfer and management service and as a minimum shall include the capability to transfer the following data types: a. Unstructured Text b. Binary Unstructured c. Binary Sequential d. Sequential Text Management services are not provided for release B.	3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.6.1, 3.6.2, 3.6.4, 3.7.2
ESN-0290#B	The file transfer and management service shall be available in interactive and non-interactive services.	3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.6.1, 3.6.4, 3.7.1
ESN-0300#B	The file transfer and management non-interactive services shall be able to be scheduled.	3.6.4
ESN-1180#B	The ESN shall interoperate with NSI to provide user access to ECS/ B0 does not support JPL and ORNL DAACs.	3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 3.5.1, 3.6.1, 3.6.2,

Requirement	Description	Test Case (s)
		3.6.3, 3.6.4, 3.6.5, 3.7.1, 3.7.2, 3.8.1
IMS-0400#B	The IMS shall verify user authorization by validation of inputs with information as supplied by the SMC.	3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.6.1, 3.8.1
IMS-0100	The IMS shall support, at a minimum: a. Interactive sessions b. Non-interactive sessions c. Client-server interface d. Simulated sessions for training purposes Interface is bi-directional.	3.5.1, 3.6.1, 3.6.2, 3.6.3, 3.6.4, 3.7.2, 3.8.1
IMS-0130#B	The IMS shall verify that a user is authorized to access a particular IMS service before providing the service to the user.	3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.6.1, 3.6.4, 3.8.1
IMS-0160	The IMS shall provide levels of user interaction support to include at a minimum: a. Expert (e.g., quick command driven direct information input) b. Intermediate (e.g., some prompting and automatically supplied help) c. Novice (e.g., extensive prompting and help facilities)	3.5.1, 3.6.1, 3.7.2, 3.8.1
IMS-0210#B	The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above	3.5.1, 3.6.1, 3.6.2, 3.7.1, 3.8.1
IMS-0230#B	The IMS shall restrict update of ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases to authorized users based on the users access privileges.	3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.5.1, 3.6.1, 3.7.1, 3.7.2
IMS-0510#B	The IMS shall provide tools for research planning and data search, to include at a minimum: a. Data acquisition schedules and plans b. The capability to map specified geophysical parameters to the appropriate instrument and/or Standard Product c. Descriptive information on instruments and geophysical parameters available in Standard Products d. Climatology information e. Phenomenology information f. Geographic reference aids g. Spacecraft location projections	3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.4.1, 3.4.3, 3.5.1, 3.6.1, 3.6.3, 3.6.4, 3.7.1
IMS-1080#B	The IMS shall accept requests for acquisition of data to be processed one time or as standing orders. Data Processing Requests handle one time and standing orders.	3.6.2
IMS-1650#B	IMS operations data shall contain information on: a. System utilization at the IMS b. Outstanding data distribution requests c. Outstanding processing requests d. Outstanding data acquisition requests	3.5.1, 3.6.4, 3.6.5, 3.7.1, 3.7.2, 3.8.1
IMS-1700#B	The IMS shall provide the capability to generate reports on: a. The backlog of data distribution requests b. The backlog of processing requests	3.6.1, 3.6.4, 3.6.5, 3.7.1, 3.7.2, 3.8.1

Requirement	Description	Test Case (s)
	<ul style="list-style-type: none"> c. The backlog of dataq acquisition requests d. Data quality assessment e. Daily IMS operations summaries f. IMS performance summaries <p>Core metadata includes the quality assessment data.</p>	
SMC-1330#B	<p>The SMC shall support and maintain the information for end-to-end data ingest, processing, reprocessing, archive, and data distribution for each product, including, at a minimum:</p> <ul style="list-style-type: none"> a. Product information b. Product generation information c. Product delivery information <p>MSS collection and handling of product specific tracking data. MSS maintains log files.</p>	<p>3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 3.5.1, 3.6.1, 3.6.2, 3.6.3, 3.6.4, 3.6.5, 3.7.1, 3.7.2, 3.8.1</p>
SMC-3350#B	<p>The SMC shall generate, maintain, and update performance criteria and responses to performance deficiencies for system, site, and element resources and activities, such as:</p> <ul style="list-style-type: none"> a. Data collection b. Product generation, QA and validation c. Reprocessing d. Data delivery to DAACs and to users e. Response to user requests f. Response to TOOs g. Response to field experiments h. Response to emergency situations <p>SMC disseminates policies and procedures regulating performance criteria and responses.</p> <p>Accountability Food Chain support is in B.1.</p>	<p>3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 3.5.1, 3.6.1, 3.6.3, 3.6.4, 3.6.5, 3.7.1, 3.7.2, 3.8.1</p>